NCBI Virus

Curated collection of viral sequences and related tools

ncbi.nlm.nih.gov/genome/viruses/

The Viral Genomes page is a hub connecting to all of NCBI Virus's supported resources and documentation, as well as other related NCBI resources. It includes all complete viral genome sequences deposited in the International Nucleotide Sequence Database Collaboration (INSDC) databases.

Search
View Results
Download
FASTA, Accession numbers,
Accession list,
tab delimited

7,536 RefSeq genomes
146,658 validated neighbor sequences

Our process

Researchers submit to NCBI and other INSDS databases

Viruses
Proviruses
Satellites
Viroids

We check for
- ☑ Quality
- ☑ Taxonomy
- ☑ improve sequence annotations

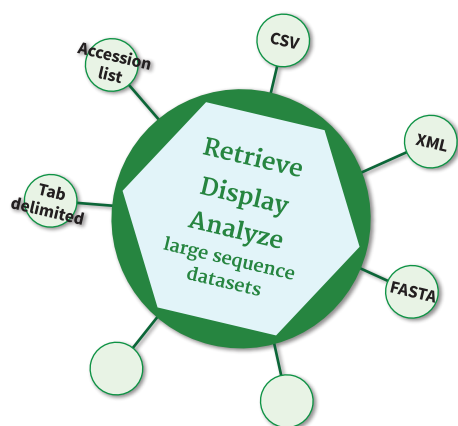### All sequences in INSDC databases

RefSeq
Reference sequence records from one (in some cases more) comp lete genome sequence for each viral species.

Neighbors
Other complete genomes from that same species.

Virus Variation   ncbi.nlm.nih.gov/genome/viruses/variation/

Retrieve Display Analyze large sequence datasets

CSV
Accession list
XML
Tab delimited
FASTA

Each module is supported by pipelines that scan newly released GenBank records, annotate genes and proteins and parse sample descriptors and then map them to controlled vocabulary. These processes in turn support a purpose-built search interface where users can select sequences based on standardized gene, protein and metadata terms. Once sequences are selected, a suite of tools for downloading data, multi-sequence alignment and tree building supports a variety of user directed activities.

influenzaviruses
dengue viruses
rotavirus A
Zika virus
ebolaviruses
West Nile virus
MERS coronavirus

viral groups
7

What's on the horizon for NCBI Virus?

Try it out at
ncbi.nlm.nih.gov/labs/virus/vssi/

New, integrated virus resource!

NCBI Virus resources are currently being redesigned to extend current functionalities to all virus groups and viroids. Additionally, the newly developed interface provides more intuitive functionality via a modernized look and feel. Try it out and let us know what you think!

- Normalized host and isolation source terms
- Specialized search, alignment and tree-building tools
- Validated full-length genomes and references
- Standardized gene and protein annotation for select viral pathogens
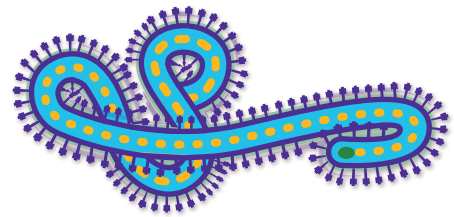
Introducing at NCBI Labs...
Virus Sequence Selection Interface

ncbi.nlm.nih.gov/labs/virus/surveillance#!/

Provides rapid insight into query sequences by presenting Blastn and Blastp results alongside their biological and genetic attributes. Virus Sequence Selection Interface currently supports BLAST searches for following popular virus groups: influenzaviruses, rotavirus A, dengue viruses, West Nile virus, Zika virus, ebolaviruses, and MERS coronavirus sequences

Want to help?

Send us your feedback!
Volunteer to test our new designs!

Send an email to info@ncbi.nlm.nih.gov
with subject "NCBI Virus - testing".

NIH U.S. National Library of Medicine
National Center for Biotechnology Information